



Earth Sciences Consultants, Inc.
One Triangle Drive
Export, Pennsylvania 15632
412/733-3000
FAX 412/325-3352

Branch Offices
Akron, Ohio
Denver, Colorado

August 15, 1991
Project No. P0450-01

Mr. John Hunter
Project Manager
Fansteel Metals
Number Ten Tantalum Place
Muskogee, OK 74401

Dear Mr. Hunter:

Attached please find the results of samples from Ponds 6 through 9 at the Fansteel Metals' Muskogee, Oklahoma facility. These results are the concentration of metals in the pond sludges by Toxicity Characteristic Leaching Procedure (TCLP) which is the measure of hazardous waste by characteristic under the Resource Conservation Recovery Act (RCRA) regulations. The results should be compared with those concentrations in Table 1 which are the threshold limit values for which characteristically hazardous wastes are determined.

Earth Sciences Consultants, Inc. has compared the results from Ponds 6 through 9 with Table 1 and have determined that the sludges in these ponds, based on these samples, are not hazardous waste as defined for characteristic wastes under RCRA. Should you have any questions, please contact me.

Sincerely,

Gary W. Berman, P.E.
Executive Vice President

GWB:ljm

Enclosures



195851

Table 1
TCLP Metal Concentrations to Determine
Characteristically Hazardous Waste

Parameter	Concentration (mg/l)
Arsenic	5.0
Barium	100
Cadmium	1.0
Chromium	5.0
Lead	5.0
Mercury	0.2
Selenium	1.0
Silver	5.0



Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15682
412/755-4161

General Data Table

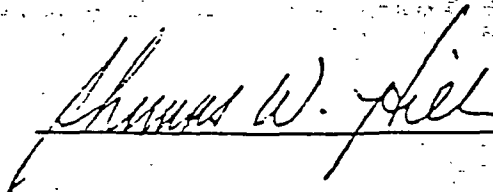
Client: Mr. John Hunter
General Manager
Fansteel Metals
Number Ten Tantalum Place
Muskogee, OK 74401

Antech Project No.: 91-1435
Receipt Date: 7/26/91
Verbal Report Date: NR
Report Date: 8/8/91
Page 1 of 1

Reference: Waste Characterization; Collected July 25, 1991

Parameter(1)	Units	Sample Identification	
		07-0928 (POND 6)	07-0929 (POND 8)
TCLP Metals:			
Arsenic	mg/l	<0.1	0.2
Barium	mg/l	<10	<10
Cadmium	mg/l	<0.1	<0.1
Chromium	mg/l	<0.1	0.3
Lead	mg/l	<0.1	<0.1
Mercury	mg/l	<0.01	<0.01
Selenium	mg/l	<0.1	<0.1
Silver	mg/l	<0.1	<0.1
TCLP Data:			
Initial pH	pH units	8.00	10.00
Final pH	pH units	5.30	4.50
Extraction Fluid	-	No. 1	No. 2
Amount of Sample used for Extraction	g	100	100

(1) Toxicity Characteristic Leaching Procedure (TCLP) results have not been bias corrected.

Approved: 



Antech Ltd.
One Triangle Drive
Export
Pennsylvania 15632
412/733-4161

General Data Table

Client: Mr. John Hunter
General Manager
Fansteel Metals
Number Ten Tantalum Place
Muskogee, OK 74401

Antech Project No.: 91-1380
Receipt Date: 7/19/91
Verbal Report Date: NR
Report Date: 8/8/91
Page 1 of 1

Reference: Waste Characterization; Collected July 18, 1991

Parameter(1)	Units	Sample Identification	
		07-0698 (Pond 7)	07-0699 (Pond 9)
TCLP Metals:			
Arsenic	mg/l	0.2	0.1
Barium	mg/l	<10	<10
Cadmium	mg/l	<0.1	<0.1
Chromium	mg/l	<0.1	0.3
Lead	mg/l	<0.1	<0.1
Mercury	mg/l	<0.01	<0.01
Selenium	mg/l	<0.1	<0.1
Silver	mg/l	<0.1	<0.1
TCLP Data:			
Initial pH	pH units	7.40	9.35
Final pH	pH units	5.40	4.50
Extraction Fluid	-	No. 1	No. 1
Amount of Sample used for Extraction	g	100	100

(1) Toxicity Characteristic Leaching Procedure (TCLP) results have not been bias corrected.

Approved: Thomas A. Hill